# STATE OF CALIFORNIA ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION

Implementation of Restructuring	)	Docket N
Legislation (Chapter 854, Statutes	)	96-REN-18
of 1996, AB 1890): Renewables	)	

# **Supplementary Comments on PV Program Details**

Respectfully Submitted by

California Photovoltaics for Utilities Collaborative (CAL PV4U)
California Solar Energy Industries Association (CAL SEIA)
Solar Energy Industries Association (SEIA)
Sacramento Municipal Utility District (SMUD)

# To **Renewables Program Committee**

January 22, 1997

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## INTRODUCTION

We respectfully submit supplementary comments to the California Energy Commission's Renewables Program Committee. Our comments reflect a consensus agreement by members of the California PhotoVoltaics for Utilities Collaborative (CAL PV4U), the California Solar Energy Industries Association (CAL SEIA), the Solar Energy Industries Association (SEIA), and the Sacramento Municipal Utility District (SMUD).

These comments do not supersede any input provided thus far, including our January 16 comments on the Staff Draft, or our November 26, 1996 consensus proposal. Rather, we provide herein supplementary information relating to "rating and certification," "program administration," and "consumer protection" to help provide implementation details for the PV program.

We strongly urge the Commission to "flesh out" these kinds of details in the upcoming Committee Draft recommendations to the legislature. In doing so, the Commission will have paved the way for faster design and implementation of the PV portion of the program, and will underscore the market-driven, consumer-oriented nature of a renewables program based on distributed, consumer-based ownership of PV systems.

## **RATING & CERTIFICATION**

The consensus proposal recommends basing customer rebates on the rated output of a PV system. While individual PV module output is rated in the course of the Underwriters Laboratory listing process, and appears on the label affixed to the module, net system output is subject to the efficiencies of other system components, including the inverter, as well as ambient conditions and particularly operating temperature.

Several rating and certification approaches should be explored, and the proposers plan to participate in the process of developing and refining them, however a key capability already exists which can play a central role in this function. The PVUSA facility in Davis is owned by the CEC, partially funded by the US DOE, operated by SMUD, and is staffed full-time. The facility has over 1 MW of grid-connected PV systems, and has been in operation for over 8 years. Rating and certification standards that were developed at PVUSA have been adopted as industry standards. The PVUSA Project, therefore, is uniquely positioned to take a lead role in the rating and certification activities, as well as in the consumer protection area.

We urge the CEC to recognize in the report to the legislature that the PVUSA project can provide the rating, certification, and consumer protection elements needed for a successful program. Further, we call attention to the detailed answers to the Commission's questions on Certification Criteria which were provided in the PV consensus proposal of November 26, 1996 (pages 17 - 20). We urge the Commission to include the essence of our responses, particularly our suggested

1

self-certification procedure for customer-sited PV systems on pages 18 and 19 of the proposal.

## PROGRAM ADMINISTRATION

We believe that a public-private partnership, perhaps in association with the California Energy Commission, should be established to manage the implementation of the PV program. This partnership would be responsible for administering and distributing the allocated AB 1890 funds, as well as other contributions, should they become available, including those from voluntary sources. Issues pertaining to ratings, certification, product quality assurance, customer satisfaction, and marketing should also fall under the purview of this administrative partnership. As stated above, the existing PVUSA project staff could provide support on many of these program elements.

Most importantly, the proposed Greenback consumer rebate program enables program activity to be monitored by the administrator. Information on PV system price, location, and size will be provided as part of the Greenback certification process. Therefore, the Greenback mechanism provides the information needed for program administrators to determine whether industry volume and price targets are being met, and enables accurate adjustments to be made, if needed, to ensure optimum program progress. The self-regulating nature of this design ensures that monies are allocated to projects commensurate with customer demand for PV product, rather than by some anticipatory mechanism based on projected need.

#### CONSUMER PROTECTION

Consumer protection issues are closely tied to rating and certification. The most obvious goals of a consumer protection effort are to ensure system quality and performance while preserving to the greatest extent possible a market-based program. We have proposed that an ongoing consumer protection program be implemented and believe that PVUSA can play a significant role in affording consumer protection.

In addition, the state has well-established contractor licensing laws in place, which require that entities which contract for the sale and installation of PV systems be licensed in either the C-46 Solar or C-10 Electrical classifications. Remedies for unethical or illegal actions on the part of contractors are already in place. Hence, contractor issues, which will require monitoring to some extent, may need only minimal attention from a program design perspective

In closing, we urge that the Commission, where needed and appropriate, call on the PV industry to assist in developing and further refining the necessary program elements. Our resources are available to the Commission, and the industry is willing to invest whatever time is needed to assure the best possible final product. Thank you for the opportunity to comment.

